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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,317	12/06/2001	Srinivas Guddanti	10016586-1	4745
22879	7590	12/04/2003	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			LEE, SUSAN SHUK YIN	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/016,317	GUDDANTI ET AL. <i>[Handwritten signature]</i>	
	Examiner Susan S. Lee	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4,6-11,14-16,18-21 and 23 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,6-11,14-16,18-21 and 23 is/are rejected.
- 7) Claim(s) 4 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Upon reconsideration of the claims, the previous allowability of claims 1-4, 6-10, 12, 16, 18-21, and 23 is hereby withdrawn in view of the newly founded references to Nozawa et al. (6,499,821) and Nakane et al. (5,148,218).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohno (5,933,676).

Ohno discloses a printer system including a printer 102, printer engine 105, external devices 101, and a network 106 connecting the printer 102 to the external devices 101. The printer 102 have a sensor unit for detecting various conditions including changes in environmental conditions such as changes in external temperature, the number of pages to be printed, and the remaining amount of toner. This performance of this sensor unit reads on the instant invention's "sensing at least one environmental condition of an environment proximate to the image forming device". A printer controller 103 performs communication with the plurality of external devices 101 which reads on the instant invention's "communicating data regarding the at least one environmental condition externally of the image forming device" because controller 103 receives information on the changes in the printing conditions, such as the

Art Unit: 2852

environmental changes and changes in internal conditions of the printer, and transmits information to a panel unit 104 and external devices 101. The controller 103 also executes calibration in response to an instruction from the panel unit 104 and the external devices 101 which reads on the instant invention's "receiving a request within the image forming device from a source 101 external of the image forming device", and "communicating responsive to the receiving". Note column 5, lines 1-12. Note column 4, line 60- column 6, line 50; and column 7, lines 9-14. The printer controller 103 comprises a RAM, as a storage memory used by the CPU 309; 310, an EEPROM configured with a non-volatile memory for storing control information, such as a density correction table, for example. Note column 7, line 65-column 8, line 11. An engine controller 150 supervises an occurrence of changes in the printing conditions, which requires calibration, at any time. When any change in printing conditions occur, the engine controller 150 notifies information on the change in the printing conditions to the printer controller 103. Note column 8, lines 37-44. Ohno recites "executes calibration" (note column 5, lines 10-11) which reads on the instant invention "determine a quantitative parameter" since "for testing other image forming devices" in claim 16, line 12 is considered intended use. Thus, very little patentable weight is given to "for testing other image forming devices".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6, 7, 10, 11, 15, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno (5,933,676) in view of Nozawa (6,499,821).

Ohno, as discussed above, differs from the instant invention by not disclosing a processing circuitry configured to control storage of the data using the memory to provide a history of the environmental conditions.

Nozawa discloses a printing apparatus with a unit that counts a number of drive pulses applied to a print head and a unit that measures a temperature of a print head and a time elapsed at the temperature in conjunction with each other, and stores a temperature history. As to claims 2, 11, and 23, the print head 1 reads on the instant invention's consumable to form the hard images since it is exchangeable (note column 8, line 51) and the head history memory unit's contents may be refreshed when the head 1 is exchanged. Note column 8, lines 48-51.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ohno with that of Nozawa so that controls of devices within an image forming apparatus in which temperature affects can be better monitored.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno, as modified by Nozama (6,499,821), as applied to claims 1-3, 6, 7, 10, 11, 15, 19, and 23 above, and further in view of Nakane et al. (5,148,218).

Ohno, as modified by Nozawa, as discussed above, differ from the instant invention by not disclosing an internal power source to provide power to the sensor in an absence of power from a source external of the image forming device.

Nakane et al. discloses a humidity detector 100, a temperature detector 101, timer 121, coding circuit 122, memory controller 123 and memory 124 in an image forming device are always applied night and day with a drive voltage by the chargeable battery 120.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ohno in view of Nozawa with that of Nakane et al. so that the environmental sensors are always operating whether there is power or not supplied from the outside.

Claims 9, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno, as modified by Nozama (6,499,821), as applied to claims 1-3, 6, 7, 10, 11, 15, 19, and 23 above, and further in view of Nakahara et al. (Japan, 151).

Ohno, as modified by Nozawa, as discussed above, differ from the instant invention by not disclosing the environmental conditions include humidity.

Nakahara et al. discloses a temperature/humidity sensor 10 an environmental sensor. This sensor is attached to the image forming device main body. Note abstract.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ohno in view of Nozama with the sensor of Nakahara et al. so that both temperature and humidity can be sensed in the surrounding areas of the image forming apparatus so that optimal image formation based on the environmental changes can be obtained. In addition, Nakahara et al. shows that environmental conditions around an image forming apparatus also includes humidity.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno in view of Nakane et al. (5,148,218).

Ohno, as discussed above, differ from the instant invention by not disclosing an internal power source to provide power to the sensor in an absence of power from a source external of the image forming device.

Nakane et al. discloses a humidity detector 100, a temperature detector 101, timer 121, coding circuit 122, memory controller 123 and memory 124 in an image forming device are always applied night and day with a drive voltage by the chargeable battery 120.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ohno with that of Nakane et al. so that the environmental sensors are always operating whether there is power or not supplied from the outside.

Allowable Subject Matter

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

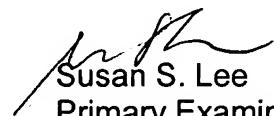
Response to Arguments

Applicant's arguments with respect to claim 11 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan S. Lee whose telephone number is 703-308-2138. The examiner can normally be reached on Mon. - Fri., 10:30-8:00, Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Art Grimley can be reached on 703-308-1373. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3432 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Susan S. Lee
Primary Examiner
Art Unit 2852